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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/750,387 | 12/28/2000 | David M. Hoffman | 15-CT-5419 | 6352 |

7590 06/03/2004

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EXAMINER

KAO, CHIH CHENG G

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| ART UNIT | PAPER NUMBER |
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2882

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------|--|--|--|
| Advisory Action | Application N . 09/750,387 | Applicant(s) HOFFMAN, DAVID M. | |
| | Examin r Chih-Cheng Glen Kao | Art Unit 2882 | |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-20.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Craig E Church
Craig E. Church
Primary Examiner

Continuation of 5. does NOT place the application in condition for allowance because:

Applicant argues that Toth et al. does not disclose a plurality of staggered half detector segments abutted in regions about a center line (Fig. 4, #20) and that Toth et al. instead discloses a known detector array including a plurality of full sized module detector sections 20. The Examiner disagrees for the following reason. Based on the language of the claims, the claims are open-ended in nature as exemplified by the transitional phrase "comprising" in claim 1, line 1, of the instant application. Thus, the claims do not exclude additional or unrecited elements. In this situation with Toth et al. and the claims in this instant application, a device comprising a plurality of staggered half detector segments abutted in regions about a center line would necessarily be in a detector array including a plurality of full sized module detector sections as two sets of a plurality of staggered half detector segments abutted in regions about a center line. These two sets would complement each other to form a plurality of full sized module detector sections in a detector array. Thus, Toth et al. discloses and reads on claim language of a method or device comprising a plurality of staggered half detector segments abutted in regions about a center line.

Applicant argues that Oomori et al. does not teach a plurality of staggered half-detector segments abutted in regions about a center line extending in a z-direction and that Oomori et al. instead appears to illustrate units in a zigzag form that overlap in a direction traverse to the z direction (i.e., patient axis) and are not abutted in regions about a center line. The Examiner disagrees for the following reasons. Segments in Oomori et al. are abutted in regions about a center line extending in a z-direction. The centerline extending in a z-direction is depicted in Figure 1(a) as #8. The segments abutting in regions about this centerline are shown in the figure at the edges of those detector segments (Fig. 1(a), #5) that are in the regions about this centerline (#8). Figure 1(a) further illustrates half of the detector segments on one side of the center line (detector segment #5 on the left side of centerline #8) and half of the detector segments on the other side of the centerline (detector segment #5 on the right side of centerline #8). Lastly, the zigzag form illustrated by Oomori et al. is a staggered relationship. Thus, Oomori et al. teaches a plurality of staggered half-detector segments abutted in regions about a centerline extending in a z-direction.

Based on these points in the Examiner's position, Toth et al., Oomori et al., and Fujise, considered alone or in combination, describe or suggest acquiring attenuation data from a plurality of staggered half detector segments of the detector array, where the staggered half detector segments are abutted in regions about a centerline extending in the z-direction, and thus make claims unpatentable over Toth et al. in view of Oomori et al. and Fujise.

Applicant argues that Toth et al., Oomori et al., and Fujise, considered alone or in combination, do not describe or suggest a plurality of detector modules that include at least a first type of detector module having a cable extending into a gap. The Examiner disagrees for the following reasons. In addition to the points recited above, Toth et al. further discloses cables extending (Fig. 5, #70). Oomori et al. further teaches a gap as seen in Figure 1(a) between the detector segments (#5) in the centerlines (#8). If one of ordinary skill in the art were to modify the device of Toth et al. with the gap of Oomori et al., the only place the cables of Toth et al. would extend is into the gaps of Oomori et al. Based on the rationale given above, claims are unpatentable over Toth et al. in view of Oomori et al. and Fujise.

Applicant argues that Toth et al., Oomori et al., Cuppen, Fujise, and Gordon, considered alone or in combination, do not describe or suggest a plurality of staggered half-detector segments separated from one another by a gap and configured to provide attenuation data having a relatively higher spatial resolution near a centerline extending in a z-direction of the detector array and a relatively lower spatial resolution distal to the centerline. The Examiner disagrees for the following reasons. In addition to the points recited above, the widths described by Applicant with regards to Cuppen is related to the relatively higher spatial resolution near a centerline and lower spatial resolution distal to the centerline. As seen in Figure 4 of Cuppen, the detectors, in the centerline as outlined by #13, have smaller widths creating a greater number of pixels in an area compared to the number of pixels with wider widths outside this area. This greater number of pixels creates a higher spatial resolution compared to the area outside of this centerline. Thus, Toth et al., Oomori et al., Cuppen, Fujise, and Gordon, considered alone or in combination, describe or suggest a plurality of staggered half-detector segments separated from one another by a gap and configured to provide attenuation data having a relatively higher spatial resolution near a centerline extending in a z-direction of the detector array and a relatively lower spatial resolution distal to the centerline, and thus make claims unpatentable over Toth et al. in view of Oomori et al., Cuppen, Fujise, and Gordon.

Craig E. Church
Primary Examiner